

somewhat discursive and diffuse, but on the other hand it does not suffer from the split between the two cultures and does not—as do some of our own popularizations—produce a detailed and elegant picture of a limited speciality—only to leave the reader to draw his own wrong-headed conclusions.

Covering a vast field of knowledge and a great span of time, and not working at a university, the author mostly had to draw on secondary sources. However, by submitting the manuscript to expert friends, he has avoided any glaring mistakes although there occur some errors and misconceptions. To the reviewer the most interesting parts of the book are those dealing with the contemporary efforts of racialists and with the speculations concerning the future of our species.

H. KALMUS

FINGER PRINTS

Galton, Francis. *Finger Prints*. Unabridged republication of the 1892 edition. New preface by **Harold Cummins**. New York, 1965. Da Capo Press. Pp. XXIII+xvi+216. Price \$6.95.

IT IS, OF course, an accepted fact of life that identity of finger prints establishes without doubt the identity of their makers. One wonders how many people realize that Galton, among his many contributions to knowledge, enunciated and ratified in this book, first published in 1892, the principle: “complete or nearly complete accordance between two prints of a single finger . . . affords evidence requiring no corroboration, that the persons from whom they are made are the same”. If for no other reason than that it is a major pioneer work in criminology this late nineteenth-century book, now re-edited so beautifully, is well worth reading. But there are other reasons.

This reviewer had on a former occasion been delighted by the vivid precision of Galton's writing in his slightly earlier book, *Inquiry into Human Faculty*. This book shows equally well Galton's superb yet simple command of language, his aptness of simile and his ingenuity and persuasiveness of illustration. He is a master of clear expression. Would that there were more of them nowadays.

It is most fitting that this new edition of Galton's book should have been produced at this time under the guidance of Professor Cummins of Tulane University. Whereas in the past dermal ridge patterns have chiefly concerned the criminal detective, within the last few years they have become of great interest to those who study human disease, especially the chromosome disorders. In these disorders the dermal ridge patterns depart from normal to the extent that they can be used for clinical diagnosis. The first recognition of this fact was made by Professor Cummins thirty years ago.

In scientific work much is ephemeral. Methods are developed, are used for a time and are discarded. This book shows how good work may stand the test of time. The arch, loop, whorl system of classification and the recognition of triradii set forth by Galton are the foundations on which the new science of clinical dermatoglyphics rests.

The type in which this book is set and the paper used are most pleasing. It is a fascinating little book.

G. H. VALENTINE

ZOOLOGY

Morris, Ramona and Desmond. *Men and Apes*. London, 1966. Hutchinson. Pp. viii+271. Price 50s.

THIS IS A delightful book, a classic of its kind, which is calculated to appeal both to the professional zoologist and to the general reader. It concerns what may be termed the ideology of man in relation to the apes, apes here being read as including monkeys as well as man-like apes. This is the effort of a happy man and wife combination. Dr. Morris is a zoologist, specializing in animal behaviour research, who is also a painter and his wife Ramona is a historian who has spent a number of years scripting and researching on animal programmes for television. Here is displayed great erudition, combined with qualities of readability and liveliness, which passes in review man's ideas, more often illusions, about the nature of his nearer relatives in the animal world from the earliest times down to the present. The mythology of the apes is highly entertaining and often bizarre and it is salutary

to be reminded just how wrong intelligent people can be in reading their preconceptions into the behaviour of these animals. Even the discovery of evolution by the agency of natural selection has contributed sometimes to obscure the picture. People in search of biological analogies and missing links have over-simplified the distinctive and idiosyncratic qualities of the primates, both in a specific and an individual sense.

In helping to correct the picture, this book may be regarded as a valuable introduction to the study of ethology in relation to the non-human primates. The really scientific study of the behaviour of these animals may be considered as dating from Sir Solly Zuckerman's study of baboons, *The Social Life of Apes and Monkeys*, published in 1932. This work evoked a great interest, but tended in some respects to distort the true image of the non-human primate, in that the characteristics of the baboon were sometimes extrapolated to other primates whose closer study revealed them to exhibit different patterns. The phenomena of dominance, for example, so markedly shown in the baboon are relatively weak or even absent in some other primates. The picture of the gorilla conjured up by the script writers of Hollywood was perhaps partly built on the basis of such unwarranted extrapolation. In real life, the gorilla, far from being a brutal and pugnacious aggressor, whose diabolical nature might lead him to ravish beautiful women, is a creature who would rather flee than fight and who is quite disappointing from a Hollywood point of view, when placed in a potentially piquant situation. It seems that once a gorilla did by accident get shut up all night with an attractive young woman, but it displayed no attempt to do the things which provide headlines for the more popular Sunday newspapers. In fact it showed itself to be a little frightened, a little lonely and snuggled up to the young lady, not for any unbecoming purpose, but merely for warmth and comfort. Clearly it is much safer for a young woman to pass the night in the cage of a gorilla than in Central Park, New York.

There is an informative account here of the studies being prosecuted in primate life and behaviour and from the fact of it being unmentioned it may be assumed that experimental

work in breeding apes and monkeys in order to elucidate problems of genetics has yet to be embarked upon. Surely this is a field where there are immensely instructive lessons to be learned. The idea of a selective grading up of human beings in respect of intelligence and other qualities of positive biological value, suggested by Professor H. J. Muller and the present writer as being feasible through the employment of artificial insemination, might be carried out in apes without encountering many of the objections which have been raised regarding donor insemination in the human subject. Breeding apes by AID need excite no more moral objections than breeding cattle in the same way. But it might throw immense light on what might be accomplished in the genetic ennoblement of the human species by voluntary choice of germinal material, whose general image and acceptability is likely to be very different in AD2000 from what it is to-day. The same idea might be applied to canines and breeding them for intelligence, longevity and other qualities combining benefits for the dog with instruction for its master should be far more rewarding than the senseless sort of genetic debasement which now goes on in selecting for arbitrary show points of negative biological value. One cannot help thinking that a chimpanzee with a pongid IQ of 160 plus might be a quite entertaining companion.

The authors of this work have happily summarized its spirit and content in these words: "The real lives of monkeys and apes are quite as odd, and in many respects are still as mystifying as the fanciful tales of yesterday. The truth may not be stranger than fiction, but it is just as exciting". This indeed merits the verdict of an exciting book.

HERBERT BREWER

WORLD RESOURCES

Smith, G. H. (Editor). *Conservation and Natural Resources*. New York and London, 1965. Wiley. Pp. xi+533. Price 75s.

Fisher, Joseph L. and Potter, Neal. *World Prospects for Natural Resources*. Baltimore, 1964. Johns Hopkins Press (London, 1965. Oxford University Press). Pp. vi+73. Price 12s.